

## **REMARKS**

Claims 1 and 2 are pending in the present application. Claims 1 and 2 are rejected. In response, Claim 1 is amended, and Claim 4 is added. Claim 3 was previously cancelled. Reconsideration is respectfully requested.

### **I. Claim Rejections Under 35 U.S.C. §103**

Claims 1 and 2 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,565,974 issued to Smoot (“Smoot”) in view of U.S. Patent No. 5,475,342 issued to Nakamura et al. (“Nakamura”) and further in view of French Publication No. 2532802 issued to Jarret et al. (“Jarret”). Applicants respectfully traverse the rejections.

Applicants amend Claim 1 to more specifically recite that “the control signal having a first level when the first reference voltage is lower than the comparison voltage, and the control signal having a second level when the first reference voltage is higher than the comparison voltage.” Further, part of the limitations of Claim 1 regarding the pre-amplifier is moved to the end of the claim to improve clarity. Applicants also add a new Claim 4 to recite that “the impedance control circuit comprises serially-connected resistors, one of which is parallelly connected with a transistor.” None of the cited references teach or suggest these limitations.

The Examiner continues to rely on Bayruns for disclosing an automatic transimpedance control amplifier. However, Bayruns does not disclose that the transistor is turned on/off to control the transimpedance. More specifically, Bayruns does not disclose that the transistor is turned on when the control signal of the first level is generated, and is turned off when a control signal of the second level is generated. Rather, Bayruns discloses that the MAGC1’s source-to-drain resistance is changed to adjust the load resistance. There is no indication that MAGC1 is operated as a device that gets turned on or off according to the level of the control signal.

The Examiner also relies on Smoot for disclosing a FET shunt device that takes an output from a differential amplifier and compares it with a BIAS voltage. However, Smoot does not disclose that the comparison result is used to control the on/off status of a transistor for impedance control. The other cited references (Nakamura and Jarret) do not supply the missing elements. Thus, none of the cited references teach or suggest the use of comparison result of two

voltages to determine the on/off status of a transistor for impedance control. For at least the reasons set forth above, amended Claim 1 is non-obvious over the cited references.

Claim 2 depends from Claim 1. Thus, for at least the reasons mentioned above, Claim 2 is non-obvious over the cited references. Accordingly, withdrawal of the rejection of Claims 1 and 2 is requested.

New Claim 4 recites the additional feature shown in Figure 6 of the present application. Bayruns does not disclose the use of serially-connected resistors, one of which is parallelly connected with a transistor. Rather, Bayruns discloses the use of a transistor MAGC1, which is parallelly connected to a resistor, to change the load resistance of a second stage circuit. The other cited references do not supply the missing elements. Thus, Claim 4 should be patentable.

#### PETITION FOR EXTENSION OF TIME

Per 37 C.F.R. 1.136(a) and in connection with the Office Action mailed on July 11, 2008, Applicant respectfully petitions Commissioner for a one (1) month extension of time, extending the period for response to November 11, 2008. Please charge Deposit Account No. 02-2666 in the amount of \$65.00 to cover the petition filing fee for a 37 C.F.R. 1.17(a)(1) small entity.

### **CONCLUSION**

In view of the foregoing, it is believed that all claims now pending, namely Claims 1, 2 and 4, patentably define the subject invention over the prior art of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (310) 207 3800.

Respectfully submitted,

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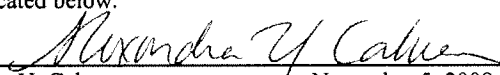
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### **CERTIFICATE OF TRANSMISSION**

I hereby certify that this correspondence is being submitted electronically via EFS Web to the United States Patent and Trademark Office on the date indicated below.

  
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Alexandra Y. Caluen November 5, 2008